

A COMPUTATIONAL STRATEGY FOR VERIFICATION AND VALIDATION IN COMPUTATIONAL MECHANICS; PART 2: THE CASE OF DATA WITH UNCERTAINTIES

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This investigation is a continuation and generalization of Part 1 in which the data exhibit scatter and, equivalently, uncertainties. It is shown that many of the approaches and algorithms carry over to this case. Several approaches for rigorously treating uncertainties, within the same framework as the deterministic case, can be followed. Among procedures considered are the “worst-case scenarios”, stochastic and fuzzy set approaches. Illustrative examples are presented.